## UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK

IN RE:

APPLICATION OF INTERNATIONAL MINERAL RESOURCES B.V. FOR AN ORDER TO TAKE DISCOVERY PURSUANT TO 28 U.S.C. § 1782

Applicant.

Case No. 1:15-mc-00241

## **DECLARATION OF MELANIE MAUGERI**

Pursuant to 28 U.S.C. § 1782, I, Melanie A. Maugeri, declare under penalty of perjury as follows:

- 1. I am a Digital Forensic Examiner at Stroz Friedberg, LLC ("Stroz Friedberg"). I submit this Declaration in support of International Mineral Resources B.V.'s ("IMR")

  Opposition to Patrick Salisbury's Motion to Quash. This Declaration is based upon my own personal knowledge except where otherwise indicated. It is not intended to detail each and every step taken during my analysis and, if requested, a supplemental declaration can be provided further detailing my analysis.
- 2. I have been employed at Stroz Friedberg since 2011 and currently serve as a Digital Forensic Examiner in the company's San Francisco office. Stroz Friedberg is a consulting and technical services firm specializing in computer forensics; data breach and computer crime response; security science; cyber investigations; intelligence and investigative services; and electronic data preservation, analysis, and production. The firm has domestic offices in New York, Washington, DC, Los Angeles, San Francisco, Boston, Chicago, Minneapolis, Seattle, and Dallas, as well international offices in London, Zurich, and Hong

Kong. The firm's management and technical staff includes former state and federal prosecutors and law enforcement officers, as well as information security professionals.

- 3. I have been trained in the use of computer forensic tools and techniques, including forensic tool sets such as EnCase, Access Data's Forensic Toolkit, and Blacklight. I also have received training in the investigation and analysis of networked and stand-alone systems, including Microsoft Windows, Mac, and Linux operating systems. I have forensically acquired and analyzed thousands of items of digital media, including desktops, laptops, servers, external drives, and handheld devices. In addition, I have authored or assisted in the drafting of numerous expert reports on a variety of computer forensic matters, including intellectual property theft, metadata analysis, file deletion activity, the chronology of movement of electronic documents among different storage media, and the analysis of the authors and editors of key electronic documents. Attached as **Exhibit A** to this declaration is a true, correct, and current copy of my curriculum vitae, which sets forth additional aspects of my qualifications, experience, and background.
- 4. Stroz Friedberg was retained by Kobre & Kim LLP ("Kobre & Kim"), on behalf of IMR, to preserve and examine a SanDisk USB thumb drive bearing the Serial Number 2006026692115C918C4A (the "Thumb Drive"). On October 21, 2015, Kobre & Kim provided Stroz Friedberg with two Adobe Acrobat PDF files named "E320\_3174.pdf" (hereinafter, "Exhibit 320") and "E-362\_3779.pdf" (hereinafter, "Exhibit 362"), and requested that I perform an examination of the two documents to determine whether documents with the same or similar content existed on the Thumb Drive.
- 5. Exhibit 320, a thirteen-page document, and Exhibit 362, a ten-page document, appear to be scanned documents, or hard copy documents converted to electronic format through use of a scanner. One way to identify exact duplicates of a document is to calculate the document's

MD5 hash value,<sup>1</sup> or "digital fingerprint," of the document and compare it to the MD5 hash values of the files on the Thumb Drive. However, the format in which the documents were provided limited my ability to search for the identical "original" or "native" version of the document by hash value as it existed before it was printed and then scanned, as the process of printing and scanning a document effectively creates a new document with a new hash value. No exact duplicates by MD5 hash value of Exhibit 320 or Exhibit 362 were identified on the Thumb Drive.

- 6. I then performed a keyword search across the files on the Thumb Drive using certain phrases² found in Exhibit 320 and Exhibit 362 in an attempt to identify copies of those documents. I reviewed a sample set of the responsive documents and found documents that appeared to be similar to Exhibit 320 and Exhibit 362. Specifically, I identified a document that appeared to be similar to Exhibit 320 named "Shanghai board meeting.pdf" with MD5 hash value 99c070f86c8d40601c4badcd8631bedc, in addition to five copies of a document named "LOI\_7860983\_7\_Shanghai\_ Board minutes (Pathfinder).DOC" with MD5 hash value fa3cf3075ca446c6ed3f7cda76158d6e. I also identified four copies of a document named "Project Imperial Information Book 091122.pdf" with MD5 hash value 828cbba0b4858ad9a6e7b518f1e0b292 that appeared to be similar to Exhibit 362.
- 7. I compared the text content of each set of documents using both manual review and the program Beyond Compare,<sup>3</sup> which is a text recognition file viewer that allows a user to compare two files and determine how similar they are. During this comparison, I found no differences in the text content between Exhibit 320 and both "LOI\_7860983\_7\_Shanghai\_ Board minutes (Pathfinder).DOC" and "Shanghai board meeting.pdf." The text of these documents and Exhibit 320 were identical, word for word.

<sup>&</sup>lt;sup>1</sup> MD5 hash values are 32-character, alphanumeric strings that are generated through a mathematical calculation using a hash algorithm. The resulting hash value serves as a "digital fingerprint" for the file. If two files differ in any way, they will not produce the same hash value.

<sup>&</sup>lt;sup>2</sup> Keywords used to search for similar documents included "potash mine," "CONFIDENTIAL INFORMATION BOOK," "LOI-7860983v7," and "SHAFT SINKERS."

<sup>&</sup>lt;sup>3</sup> Beyond Compare version 4.1.1 was used during this review.

- 8. For the document "Project Imperial Information Book 091122.pdf," which consists of 106 numbered pages, I found that Exhibit 362 contained the same text content as pages 1, 10, 11, 18, 19, 86, 87, 88, 89, and 90 of "Project Imperial Information Book 091122.pdf." Thus, Exhibit 362 appeared to be a ten-page excerpt of the file "Project Imperial Information Book 091122.pdf" with ten pages that were the same, word for word.
- 9. I declare under penalty of perjury under the laws of the United States and the state of California that the foregoing is true and correct to the best of my knowledge and belief.

Executed this 23th day of October 2015, at San Francisco, California.

STROZ FRIEDBERG, LLC

By: Melanie A. Maugeri